

-NOV-2003 (ITSE entry)

*S*aphylococcus aureus antigenic protein #7, antigenic protein; vaccine; *S*taphylococcus aureus; pathogenic organism; bacterium; neuroprotective; immunosuppressive; antiinflammatory; inducer; immunostimulant; ophthalmological; pathogenic microbe; bacteremia; septic shock; organ infection; bacterial basal colonization; bacterial eye infection; septicus; endocarditis; peritonitis; food poisoning; blad infection; peritonitis; endocarditis; meningitis; pneumonia; stomach ulcer; gonorrhea; toxic shock; prototyping fasciitis; impetigo; histoplasmosis; Lyme disease; astro-enteritis; dysentery; shigellosis; skin disorder

See ID No. 1

51 TOPPKDTM2QPATQPATKNTYPAADESLKDAIKDPALENEKEHDIGPQEQLQDNR 120
 52 phylecoccus aureus.
 53 000301189-A2.
 54 FEB-2003
 55 AUG-2002; 2002WO-GB001606.
 56 AUG-2001; 2001GB-0018B25.
 57 JAN-2002; 2002GB-0000349.
 58 (SH-) UNIT SHEFFIELD.
 59 (SCH-) BIOSTEXUS INC.
 60 Peter S., Mand J., Clarke S., McDowell B., Scrummel K.;
 61 : 2803-25634/25.
 62 antigenic polypeptides from Staphylococcus aureus or S. epidermidis
 63 useful as a vaccine for immunizing humans against e.g. bacteremia, septic
 64 shock, septicemia, tuberculosis, meningitis, pneumonia, gonorrhoea or
 65 tetriose.
 66 4: Page 124; 169pp; English.
 67 The present invention describes an antigenic protein or its part, which
 68 for use as a vaccine. The antigenic protein is encoded by an isolated
 69 molecule of Staphylococcus aureus or S. epidermidis partial gene
 70 sequences (designated chsa and dna SE, respectively) and which encodes a
 71 certain expressed by a pathogenic organism. Also described: (1) a vaccine
 72 comprising at least one antigenic protein; (2) a method of
 73 immunising an animal against a disease or condition caused by a
 74 pathogenic microbe by administering this antigenic protein or the vaccine;
 75 an antibody or its binding part obtainable by the method above; (4)
 76 bearing a hybridoma cell line producing monoclonal antibodies; (5) a
 77 hybridoma cell line produced by the method of (4); and (6) identifying
 78 antigenic antigens expressed by a pathogenic microbe.
 79 The antigenic proteins have antibacterial, neuroprotective, immunosuppressive,
 80 antiinflammatory, antiallergic, immunomodulatory, and ophthalmological
 81 activities, and can be used in vaccines. The antigenic proteins or
 82 vaccines can be used for immunising an animal (specifically a human)
 83 against a disease or condition caused by a pathogenic microbe, e.g.,
 84 septic shock, organ infection, skin infection, bacterial
 85 colonisation, bacterial eye infections, septicemia, tuberculosis,
 86 bacteria-associated food poisoning, blood infections, peritonitis,
 87 endocarditis, meningitis, pneumonia, stomach ulcers, gonorrhoea,
 88 streptococcal-associated toxic shock, necrotising
 89 impetigo, histoplasmosis, Lyme disease, gastro-enteritis,
 90 enteritis, shigellosis, S. aureus-associated septicemia, food-poisoning,
 91 disorders, S. epidermidis-associated septicemia, peritonitis or
 92 septicaditis. The present sequence represents a S. aureus antigenic
 93 sequence from the present invention.
 94 841 KTEKAGTAKKEMLKSOSKMLPKCETTSQSMGLYKIGWLMALPKEKESK 935
 95 sequence 695 AA:
 96 61 121 NETQYTHRSIKDPADEYVTKKKAEVELDINTASTKPEVEYENQKPLVRYSPVPS 180
 97 Db 121 KETQYTHRSIKDPADEYVTKKKAEVELDINTASTKPEVEYENQKPLVRYSPVPS 180
 98 QY 181 DDAYIREPPSDGQELKIVSSTQDGGSETMYQXKLVPAKINDEFLVSKDNDATV 240
 99 Db 181 DDAYIREPPSDGQELKIVSSTQDGGSETMYQXKLVPAKINDEFLVSKDNDATV 240
 100 QY 241 NDQSSSVASRQNTNTSCKTSTIMARQPOATTMSQACPKESSTNAQASSPABET 300
 101 Db 241 NDQSSSVASRQNTNTSCKTSTIMARQPOATTMSQACPKESSTNAQASSPABET 300
 102 QY 301 NSKGENTNTNTSSNQCNQGOTPEADLQGATKNSPKLIDKNTADKPRPITMKNC 360
 103 Db 301 NSKGENTNTNTSSNQCNQGOTPEADLQGATKNSPKLIDKNTADKPRPITMKNC 360
 104 QY 361 GRCQPHASTVTPATVTTKSPILRGCNTATAKCCNTYTCMPLVSYTSDD 420
 105 Db 361 GRCQPHASTVTPATVTTKSPILRGCNTATAKCCNTYTCMPLVSYTSDD 420
 106 QY 421 YAYIREPPSNGTREVKIVSSEYERHEDYDYLKVEFPTNEDDYDEETTNLQL 480
 107 Db 421 YAYIREPPSNGTREVKIVSSEYERHEDYDYLKVEFPTNEDDYDEETTNLQL 480
 108 QY 481 LAPYHAKTLERQYELQELQKPLKPKYKPLQDCEVALATOYKSAVTRENTET 540
 109 Db 481 LAPYHAKTLERQYELQELQKPLKPKYKPLQDCEVALATOYKSAVTRENTET 540
 110 QY 541 NGQTDLZAHHTYFSESENSESYNDGEHEFTATLADQKUTWNTKDSYKDLIVE 600
 111 Db 541 NGQTDLZAHHTYFSESENSESYNDGEHEFTATLADQKUTWNTKDSYKDLIVE 600
 112 QY 601 GRVTVVXQDPDNMSRTLFPVYTRAMAKRKYVANTGEGTHVAINQDNTKDD 660
 113 Db 601 GRVTVVXQDPDNMSRTLFPVYTRAMAKRKYVANTGEGTHVAINQDNTKDD 660
 114 QY 661 DSCQNTTSEPIVNTGQGOKXAWADVAEVSSTATPKDADKADTBPEDVYDADDNI 720
 115 Db 661 DSCQNTTSEPIVNTGQGOKXAWADVAEVSSTATPKDADKADTBPEDVYDADDNI 720
 116 QY 721 DVOVQHDTBLISNDKAPDKILMENDQIAKTDATDANTDQDANSVNGNTTFRDS 780
 117 Db 721 DVOVQHDTBLISNDKAPDKILMENDQIAKTDATDANTDQDANSVNGNTTFRDS 780
 118 QY 781 RHNKDKVQGMBTACNNNTGKAALDVTYKNTDVKDNTTSHLPSIERTVDTY 840
 119 Db 781 NOKDKVQGMBTACNNNTGKAALDVTYKNTDVKDNTTSHLPSIERTVDTY 840
 120 QY 841 KTEKAGTAKKEMLKSOSKMLPKCETTSQSMGLYKIGWLMALPKEKESK 935

every Natch DB 8; Length 895;
rest Local Similarity 99.98%
Pred. No. B-6e-217;

1 KEEBHEPLRSFTSIRKTSIGSVASIVTSPITLTSQACAAENTSDXISENQNTMATT 60
884; Conservative 0; Mismatches 1; Indexes 0; Gaps 0;